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MINERAL INDUSTRY SURVEYS

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TIN IN DECEMBER 1997

In Peru, Minsur decided to end the tolling of its tin concentrates at ENAF's Vinto smelter in Bolivia. The tin previously handled at Vinto, thought to be about 4,000 tons of tin-in-concentrate annually (comprising about 30% of Vinto's total feed), will be redirected to Malaysia for smelting. Tin production at Vinto in 1998 is expected to fall short of 1997's 16,000 tons largely because of the Minsur diversion. Output at Vinto is forecast to be 9,000 tons in 1998 (Metal Bulletin, 1998).

A new report provides information on world aerosol can production. Most aerosol cans are made from tinplate, and find application in such markets as hair spray or deodorant spray or whipped cream dispersal. World aerosol can manufacture exceeded 10 billion units for the first time in 1996. Western and central Europe account for 41%, North America for 33%, Asia 15%, South America 5%, Africa 3%, Australasia 2%, and Middle East 1%. The United States led the world with production of 3,211 million units, followed by the United Kingdom with 1,442 million units, and Germany with 755 million units. Per capita consumption of aerosols shows wide differences between countries. The European Union average is 10; for constituent countries, the range is 3 to 14. The United Kingdom leads the world with 14 per capita, and the United States is next at 12 per capita (ITRA, 1997).

Update

On February 13, 1998, The *Platt's Metals Week* composite price for tin was $3.58 per pound.

References Cited

ITRA, 1997, World aerosol production: ITRA Market Monitor, no. 7, December, p. 21.

Metal Bulletin, 1998, Minsur to end tolling at Vinto: Metal Bulletin, no. 8244, January 15, p. 5.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

		1997		
	1996	November	December	January-December
Production, secondary e/ 2/	11,000	900	900	10,800
Consumption:				
Primary	36,500	3,060 r/	2,900	36,900
Secondary	8,180	904	927	10,800
Imports for consumption, metal	30,200	4,120	NA	NA
Exports, metal	4,780	335	NA	NA
Stocks at end of period	11,800	5,590 r/	5,320	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	412.43	378.42	371.93	XX
Metals Week New York dealer	288.10	264.29	260.31	XX
London, standard grade, cash	279.00	257.00	250.00	XX
Kuala Lumpur	275.19	248.18	245.16	XX

e/ Estimated. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices.

2/ Comprises tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

3/ From Platt's Metals Week.

4/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average
1996 (annual)	436.25	388.49	412.43
1996:			
December	405.37	388.49	394.76
1997:			
January	404.19	387.89	396.17
February	403.46	390.40	395.64
March	401.81	389.32	395.64
April	393.82	380.00	386.55
May	393.67	378.72	386.59
June	384.93	374.20	377.81
July	375.61	362.36	370.10
August	377.46	362.60	369.01
September	384.65	362.91	372.60
October	400.12	366.51	377.39
November	387.04	363.84	378.42
December	390.56	360.46	371.93

1/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

Source: Platt's Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms)			
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments 2/
1996	177,000	1,550,000	9,450	6.1	2,490,000
1997:					
January	15,900	168,000	853	5.1	204,000
February	13,600	166,000	775	4.7	183,000
March	12,700	172,000	784	4.5	205,000
April	13,800	176,000	776	4.4	210,000
May	13,200	175,000	721	4.1	213,000
June	12,800	165,000	782	4.7	218,000
July	12,900	172,000	777	4.5	204,000
August	12,900	165,000	687	4.2	213,000
September	14,000	175,000	819	4.7	215,000
October	12,700	163,000	834	5.1	212,000
November	11,500	160,000	789	4.9	173,000
December	11,300	152,000	705	4.6	NA

NA Not available.

1/ Data are rounded to three significant digits.

2/ Shipments data from American Iron and Steel Institute monthly publication AIS10.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1996	1997		
		October	November	January-November
Imports:				
Concentrates (tin content):				
Canada	--	7	--	20
Japan	--	--	--	37
Total	--	7	--	57
Metal (unwrought tin):				
Bolivia	6,290	834	763	5,930
Brazil	9,460	721	722	8,190
Chile	407	--	--	464
China	2,760	527	616	4,580
Hong Kong	--	--	--	258
India	898	20	160	1,720
Indonesia	7,550	600	420	6,790
Malaysia	965	30	540	1,580
Netherlands	--	--	--	200
Peru	481	680	580	6,300
Russia	435	--	40	480
Thailand	--	240	180	600
Other	922	53	99	827
Total	30,200	3,710	4,120	37,900
Other (gross weight):				
Alloys	11,800	54	164	3,800
Bars and rods	695	147	110	997
Foil, tubes, and pipes	(2/)	--	2	2
Plates, sheets, and strip	641	20	(2/)	177
Waste and scrap	6,740	311	92	1,880
Miscellaneous	1,360	164	148	1,430
Total	21,300	696	516	8,280
Exports (metal)	4,780	435	335	4,360

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	1996	1997 2/						
		November			December			January-December total
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 3/	W	31 r/	--	31 r/	37	--	37	420
Babbitt	851	7	W	7	8	W	8	191
Bar tin and anodes	1,150	8	--	8	W	W	W	W
Bronze and brass	2,760	95	94	189	W	W	W	1,790
Chemicals	7,520	622	W	622	622	W	622	7,530
Collapsible tubes and foil	240	20	--	20	28	--	28	288
Solder	15,600	443 r/	W	443 r/	377	223	600	6,130
Tinning	2,030	69	--	69	67	--	67	1,210
Tinplate 4/	9,350	789	--	789	705	--	705	9,160
Tin powder	573	W	W	W	W	W	W	192
White metal 5/	1,340	W	--	W	W	W	W	W
Other	3,230	72 r/	310	382 r/	160	204	364	4,030
Total reported	44,700	2,160 r/	404	2,560	2,000	427	2,430	30,900
Estimated undistributed consumption 6/	--	900	500	1,400	900	500	1,400	16,800
Total	44,700	3,060 r/	904	3,960	2,900	927	3,830	47,700

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Annual respondent data not prorated for individual end use data.

3/ Includes terne metal.

4/ Includes secondary pig tin and tin acquired in chemicals.

5/ Includes pewter, britannia metal, and jewelers' metal.

6/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

Period	Monthly disposals 2/
1996:	
December	200
Year total	6,670
1997:	
January	215
February	200
March	115
April	60
May	200
June	60
July	210
August	220
September	45
October	45
November	35
December	--
Total	1,410

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.

Source: Defense Logistics Agency.